UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,434	05/02/2001	John M. Belcea	1710.21	2558

7590 10/27/2005

ROYLANCE, ABRAMS, BERDO & GOODMAN, LLP
1300 19th Street, N.W., Suite 600
Washington, DC 20036

EXAMINER	
LY, ANH VU H	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,434	BELCEA, JOHN M.	
	Examiner	Art Unit	
	Anh-Vu H. Ly	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *51-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *77 and 78* is/are allowed.

6)☒ Claim(s) *51-62,65-71 and 73-76* is/are rejected.

7)☒ Claim(s) *63,64 and 72* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed August 17, 2005. Claims 51-78 are pending.

Claim Objections

2. Claim 52 is objected to because of the following informalities: in line 1, the status identifier indicates that the claim has been amended but examiner sees no changes being made.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 51, 53-57, 59-61, 65-71, 73-75, and 77 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-13, 33, and 41-47 of U.S. Patent No. 6,807,165 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because application claims 51, 53-57, 59-61, 65-71, 73-75, and 77 and U.S. patent '165 claims 8-13, 33, and 41-47 are directed to a protocol and a method for use in an ad-hoc, peer-to-peer radio system wherein each terminal is capable of

communicating with other terminals in time division mode. Signals are transmitted and received in time slots of time frames with different frequencies and time gaps inserted between frames to allow terminals to perform necessary calculations. U.S. patent '165 claims 8-13, 33, and 41-47 recite communications information instead of signals as presented in applications claims. However, communications information and/or signals are equivalent in the art since both are ones and zeros containing data and instructions. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the terms exchangeable since both terms implying both data and instructions being carried.

4. Claim 52 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,807,165 in view of Narvinger et al (US Patent No. 6,868,075 B1). U.S. Patent '165 claim 8 discloses a protocol for use in an ad-hoc, peer-to-peer network that provides collision free channel access. U.S. Patent '165 claim 8 does not disclose wherein inter frame time gap has a length different than time slots. Narvinger discloses in Figs. 7-10 that the inter frame time gap has a different length than time slots of the frame. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an adaptive inter frame time gap, as suggested by Narvinger, to accommodate different transmission delays in wireless network.

5. Claim 58 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,807,165 in view of Bolgiano et al (US Pub 2005/0185627 A1). U.S. Patent '165 claim 8 discloses a protocol for use in an ad-hoc, peer-to-peer network that provides collision free channel access. U.S. Patent '165 claim 8 does not disclose using CDMA for encoding so collisions can be avoided. Bolgiano discloses

encoding signals using code division (Fig. 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to encode signals using code division technique, as suggested by Bolgiano, to reduce collisions since each user has a distinct code.

6. Claim 62 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 33 of U.S. Patent No. 6,807,165 in view of Narvinger et al (US Patent No. 6,868,075 B1). U.S. Patent '165 claim 33 discloses a protocol for use in an ad-hoc, peer-to-peer network that provides collision free channel access. U.S. Patent '165 claim 33 does not disclose wherein inter frame time gap has a length different than time slots. Narvinger discloses in Figs. 7-10 that the inter frame time gap has a different length than time slots of the frame. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an adaptive inter frame time gap, as suggested by Narvinger, to accommodate different transmission delays in wireless network.

7. Claim 76 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-10 of U.S. Patent No. 6,807,165 in view of Bolgiano et al (US Pub 2005/0185627 A1). U.S. Patent '165 claims 8-10 disclose a protocol for use in an ad-hoc, peer-to-peer network that provides collision free channel access. U.S. Patent '165 claims 8-10 do not disclose using CDMA for encoding so collisions can be avoided. Bolgiano discloses encoding signals using code division (Fig. 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to encode signals using code division technique, as suggested by Bolgiano, to reduce collisions since each user has a distinct code.

Allowable Subject Matter

8. Claims 63-64 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 77-78 are allowed.

Response to Arguments

10. Applicant's arguments filed August 17, 2005 have been fully considered but they are not persuasive.

Applicant argues in page 15 that the term "time gap" in Narvinger is not the same as an IFTG as recited in the rejected claims. Examiner respectfully disagrees. As illustrated in Fig. 12 of Narvinger, the radio frame of Figs. 7-10 is organized as time slotted format. Therefore, the time gap as illustrated in Narvinger is the same inter-frame time gap as recited in the rejected claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

2/6/05